

Date of Survey: \_\_\_\_\_

# DRINKING WATER FACILITY EVALUATION

## 1. Administrative Issues

(Office Interview)

System Name: \_\_\_\_\_

Number: \_\_\_\_\_

Name of Surveyor: \_\_\_\_\_

Water System Representative(s)/Others accompanying survey:

\_\_\_\_\_

Phone: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

10 points will be credited to a water system with a current Emergency Response Program

**0 or 10 Points:** \_\_\_\_\_

10 points will be credited to a water system which has a written Financial Management Plan; including an appropriate rate structure, infra-structure replacement plan, master plan.

**0 or 10 Points:** \_\_\_\_\_

**Total Points Credited:** \_\_\_\_\_

## Service Data

Have there been any customer complaints received and validated during the last three (3) years dealing with any of the following list of categories?

\*\* (Indicate the number of complaints received in each category) \*\*

Turbidity \_\_\_\_\_

Pressure \_\_\_\_\_

Taste and Odor \_\_\_\_\_

Sickness (Water System Suspected) \_\_\_\_\_

Waterborne Disease Outbreak \_\_\_\_\_

Interruptions in Service or Water Outages \_\_\_\_\_

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**0 to 100 Points:** \_\_\_\_\_

## Source Monitoring

5 points will be assessed to a water system which does not have an adequate bacteriological sampling site plan. [R309-104-4(6)(1)(d)]

To be fixed by: \_\_\_\_\_

0 or 5 Points: \_\_\_\_\_

5 points will be assessed to a water system which does not have an adequate Lead/Copper sampling site plan. [R309-104-4(2)(3)(a)]

To be fixed by: \_\_\_\_\_

0 or 5 Points: \_\_\_\_\_

## Cross Connection

50 points total OR 10 points per element will be assessed to a water system that does not have any of the below listed components of a cross connection control program. [R309-102-5]

A water system which only has some of the components of a cross connection control program shall be assessed the following number of points.

10 points will be assessed to a water system which does not have local authority to enforce a cross connection program (i.e., ordinances, bylaws or policies).

To be fixed by: \_\_\_\_\_

0 or 10 Points: \_\_\_\_\_

10 points will be assessed to a water system which does not provide public education or awareness material presentations on an annual basis.

To be fixed by: \_\_\_\_\_

0 or 10 Points: \_\_\_\_\_

10 points will be assessed to a water system which does not have an operator with training in the area of cross connection.

To be fixed by: \_\_\_\_\_

0 or 10 Points: \_\_\_\_\_

10 points will be assessed to a water system with no written records of cross connection activities, such as, backflow assembly inventories, hazard assessment, and/or test history.

To be fixed by: \_\_\_\_\_

0 or 10 Points: \_\_\_\_\_

10 points will be assessed to a water system which does not have an on-going enforcement activity plan.

To be fixed by: \_\_\_\_\_

0 or 10 Points: \_\_\_\_\_

Comments regarding the above notations:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Total Administrative Issue Points: \_\_\_\_\_

**DRINKING WATER FACILITY EVALUATION****2. Wells**

(Field Interview/Inspection)

System Name: \_\_\_\_\_ Number: \_\_\_\_\_

Source Number: \_\_\_\_\_ Source Name: \_\_\_\_\_

Location: \_\_\_\_\_ Period of Use: \_\_\_\_\_

Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

A. Was Plan Approval received for this Well ? ☐ Yes ☐ No ☐ Unknown

B. Well Seal [R309-204-(6)(12)]

50 points will be assessed for any well that does not have a sanitary seal or has unsealed opening in the top of the well that could allow contamination to enter the well. A properly installed and maintained pitless adapter will meet this criteria if it has been approved by the Division of Drinking Water for the specific installation.

To be fixed by: \_\_\_\_\_ 0 or 50 Points: \_\_\_\_\_

C. Proper Lubrication Oil [R309-102-(4)(7) &amp; R309-204-(8)(2)]

25 points will be assessed for any well that requires oil lubrication if the oil used is not mineral grade suitable for human consumption.

To be fixed by: \_\_\_\_\_ 0 or 25 Points: \_\_\_\_\_

D. Elevation of Top of Well Casing [R309-204-(6)(6)(b)(vi) &amp; R309-204-(6)(13)(a)&amp;(d)]

1 to 20 points will be assessed for any casing that does not extend at least 12" above the concrete floor or 18" above the ground, or five feet above the highest flood level. No points will be assessed if a properly installed and approved pitless adapter is used. Range of points will be determined by degree of exposure to flooding, drainage, condition of floor and other factors which may jeopardize the integrity of the wellhead. If insufficient height above floor or ground, identify any conditions or factors which could jeopardize the well's sanitary integrity.

To be fixed by: \_\_\_\_\_ 0 to 20 Points: \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

E. Well Discharge Piping Equipment [R309-204-6(12)(e)(iv)]

1 point assessed for each of the following items which are not present or serviceable on the discharge piping: (1) a smooth nosed sampling tap (2) a check valve (3) pressure gauge (4) a flow measuring device and/or (5) shut off valve. CIRCLE ITEMS NOT FOUND OR NOT SERVICEABLE, AND IDENTIFY IF THEY ARE NOT IN THE ORDER LISTED.

To be fixed by: \_\_\_\_\_ 0 to 5 Points: \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

**F. Screening of Well Casing Vent**

5 points will be assessed for a well casing vent that is not properly covered with a number 14 mesh screen.

**To be fixed by:** \_\_\_\_\_ **0 or 5 Points:** \_\_\_\_\_

**G. Discharge Piping Air Vent**

[R309-204-6(12)(e)(v)]

1 to 5 points assessed for each well that does not have an air relief valve on the discharge piping. Relief valve piping must be turned down and properly screened with number 14 mesh screen. Integrity of screen must be determined.

**To be fixed by:** \_\_\_\_\_ **0 to 5 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

**H. Well House Floor Drain**

[R309-204-6(13)(b)]

1 to 5 points assessed for well houses that do not have a drain to daylight floor drain that is fully serviceable. Where does the drain end up?

**To be fixed by:** \_\_\_\_\_ **0 to 5 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

**Total Points Assessed:** \_\_\_\_\_

**ADDITIONAL REQUIRED INFORMATION** (no points assessed)

Is this source covered in a source protection plan?

☐ Yes

☐ No

Is a current well log available for this well?

☐ Yes

☐ No

Current flow rate: \_\_\_\_\_ gpm

Size of Well Casing: \_\_\_\_\_ inches

Type of Pump: Vertical Turbine \_\_\_\_\_

Submersible \_\_\_\_\_

Brand/Model of **Pump**: \_\_\_\_\_

Discharge piping size: \_\_\_\_\_ inches

Brand/Model of **Motor**: \_\_\_\_\_

Horsepower/Voltage: \_\_\_\_\_

Is there a pump to waste line with an adequate air gap ( twice pipe diameter)?

☐ Yes

☐ No

If there is a Pump House, is it secure?

☐ Yes

☐ No

Does it have adequate heating?

☐ Yes

☐ No

Does it have adequate lighting?

☐ Yes

☐ No

Does it have adequate ventilation?

☐ Yes

☐ No

Is the floor elevation at least 6 inches

above the surrounding ground elevation?

☐ Yes

☐ No
**OTHER OBSERVATIONS OR COMMENTS:**

\_\_\_\_\_  
 \_\_\_\_\_

**DRINKING WATER FACILITY EVALUATION****3. Springs**

(Field Interview/Inspection)

**System Name:** \_\_\_\_\_ **Number:** \_\_\_\_\_**Source Number:** \_\_\_\_\_ **Source Name:** \_\_\_\_\_**Location:** \_\_\_\_\_ **Period of Use:** \_\_\_\_\_**Latitude:** \_\_\_\_\_ **Longitude:** \_\_\_\_\_A. Was Plan Approval received for this Spring? ☐ Yes ☐ No ☐ Unknown

B. Ponding of Water and Surface Drainage around Spring? [R309-204-7(7)(i)]

0 to 20 points assessed for presence of, or indication of, standing water that collects over this spring collection area. Number of points will be determined by degree or amount of surface drainage, moss and /or algae in water indicating duration of ponding and the possible source of water, rainfall or incomplete collection.

**To be fixed by:** \_\_\_\_\_ **0 to 20 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

C. Impervious Soil Cover or Liner [R309-204-7(7)(a) or (b)]

10 points will be assessed for a spring source that does not have a minimum of 10 feet of impervious soil cover or two feet of cover with an acceptable liner.

**To be fixed by:** \_\_\_\_\_ **0 or 10 Points:** \_\_\_\_\_

D. Deep Rooted Vegetation [R309-204-7(7)(f)]

10 points will be assessed for a spring source that has deep rooted vegetation growing in the spring collection area.

**To be fixed by:** \_\_\_\_\_ **0 or 10 Points:** \_\_\_\_\_

E. Roots in Collection Pipes [R309-204-8(1)(a)]

10 points will be assessed for any spring collection system where deep rooted vegetation is interfering with the collection system.

**To be fixed by:** \_\_\_\_\_ **0 or 10 Points:** \_\_\_\_\_

F. Physical Features of Spring Boxes [R309-204-7(7)(d) which refers to R309-210-14]

Up to 25 points shall be assessed for spring collection and/or junction boxes which do not have the following items 1) a proper shoe box lid, 2) a gasket on the lid, 3) #14 mesh screen on the vent line, 4) adequate air vents with # 14 mesh corrosion resistant screen, and 5) locked and raised access entry. Range points shall be determined by the absence or condition of the above above items about 5 points each. (Underline each item which is not present.)

**To be fixed by:** \_\_\_\_\_ **0 to 25 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

Date of Survey: \_\_\_\_\_

G. Fencing of Spring Collection Area

[R309-204-7(7)(e)]

10 points shall be assessed for any spring collection area that does not have a stock tight fence around the collection area. No points shall be assessed for collection areas located in remote areas or areas of controlled access where no grazing or public access is possible

To be fixed by: \_\_\_\_\_ 0 or 10 Points: \_\_\_\_\_

H. Diversion Channel for Surface Runoff

[R309-204-7(7)(g)]

5 points shall be assessed for a spring collection area that does not have a diversion channel capable of diverting surface water away from the collection area.

To be fixed by: \_\_\_\_\_ 0 or 5 Points: \_\_\_\_\_

I. Flow Measurement

[R309-204-7(7)(h)]

5 points shall be assessed for each spring system that does not have permanent flow measuring device.

To be fixed by: \_\_\_\_\_ 0 or 5 Points: \_\_\_\_\_

J. Overflow and/or Drain Outlet

[R309-210-10(1) & R309-204-7(7)(d) which refers to R309-210]

Up to 10 points shall be assessed for a spring box with an overflow/drain line that is not properly screened with a # 4 mesh screen and/or does not have adequate free fall of at least 12 inches.

The number of points assessed shall be determined by the presence and condition of the screen and the amount of free fall and the slope and drainage of the area around the outlet.

To be fixed by: \_\_\_\_\_ 0 to 10 Points: \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

Total Points Assessed: \_\_\_\_\_

**ADDITIONAL REQUIRED INFORMATION**

(no points assessed)

Is this source covered in a source protection plan?

☐ Yes

☐ No

Type of Collection pipe? \_\_\_\_\_

Confined Aquifer?

☐ Yes

☐ No

Distance to Surface Water

☐ <100 ft.

☐ 100 to 200 ft.

☐ >200 ft.

Current flow rate (determined during survey)? \_\_\_\_\_ gpm

**OTHER OBSERVATIONS OR COMMENTS:**

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**DRINKING WATER FACILITY EVALUATION****4. Disinfection Facilities Gaseous Chlorine**

(Field Interview/Inspection)

**System Name:** \_\_\_\_\_ **Number:** \_\_\_\_\_**Disinfection Station Number** \_\_\_\_\_ **Station Name:** \_\_\_\_\_**Location:** \_\_\_\_\_ **Period of Use:** \_\_\_\_\_**Source(s) Treated** \_\_\_\_\_  
[include source number(s) and name(s)]A. Was Plan Approval received for this Chlorinator? ☐ Yes ☐ No ☐ UnknownB. Detectable Residual [R309-102-4(1) & R309-103-2(7)]  
10 points will be assessed to a chlorinated water system that does not maintain a chlorine residual at all times.**To be fixed by:** \_\_\_\_\_ **0 or 10 Points:** \_\_\_\_\_C. Chlorine Building [R309-205-10(1)(l)]  
2 points will be assessed for each chlorine building that is not properly heated, lighted and vented. Ventilation must include exhausting room air at or near floor level. Heating may be unnecessary in warm climates.**To be fixed by:** \_\_\_\_\_ **0 or 2 Points:** \_\_\_\_\_D. Chlorine Residual Test Kit [R309-205-10(1)(j)]  
2 points will be assessed to a chlorinated water system that does not have a functional chlorine residual test kit.**To be fixed by:** \_\_\_\_\_ **0 or 2 Points:** \_\_\_\_\_E. Cylinder Wrench on Yolk Valve  
2 points will be assessed to a chlorinated water system that does not have a chlorine cylinder wrench on the yoke valve.**To be fixed by:** \_\_\_\_\_ **0 or 2 Points:** \_\_\_\_\_F. Leak Detection and Repair Kit [R309-205-10(2)(p)]  
15 points will be assessed for a water system that uses 1 TON CYLINDERS that does not have chlorine leak detection equipment and a type B 1 ton cylinder repair kit. 2 points will be assessed for a water system that uses 150 POUND CYLINDERS that does not proper chlorine leak detection equipment and a type A 150 pound cylinder repair kit.**To be fixed by:** \_\_\_\_\_ **0, 2, 15 or 17 Points:** \_\_\_\_\_G. Restraint and Isolation of Chlorine Cylinders [R309-205-10(2)(i)]  
2 points will be assessed to a water system that does not have chlorine cylinders properly restrained and isolated from normal operating areas.**To be fixed by:** \_\_\_\_\_ **0 or 2 Points:** \_\_\_\_\_

Date of Survey: \_\_\_\_\_

H. Chlorinator Feed Vent

[R309-205-10(2)(f)]

2 points will be assessed to a water system that does not have chlorinator feeder vents properly vented and screened to outside of the chlorine room.

To be fixed by: \_\_\_\_\_

0 or 2 Points: \_\_\_\_\_

I. Chlorine Feed Rate and Cylinder Usage

[R309-205-10(2)(k)]

2 points will be assessed to a water system that does not have the equipment to accurately measure the chlorine feed rate and the usage of the cylinder (scales).

To be fixed by: \_\_\_\_\_

0 or 2 Points: \_\_\_\_\_

J. Self Contained Breathing Apparatus

[R309-205-10-(2)(o)]

5 points will be assessed to a water system using gaseous chlorine that does not have access to a self contained breathing apparatus for chlorine emergencies. 5 points will be assessed to a system that stores the apparatus in the chlorine room where getting to it would require exposure to chlorine gas.

To be fixed by: \_\_\_\_\_

0 or 5 Points: \_\_\_\_\_

K. Measurement of Chlorinated Water

[R309-205-10(1)(i)]

2 points will be assessed to a water system that does not have a means of measuring the volume of water treated with chlorine.

To be fixed by: \_\_\_\_\_

0 or 2 Points: \_\_\_\_\_

Total Points Assessed: \_\_\_\_\_

**ADDITIONAL REQUIRED INFORMATION**

(no points assessed)

Is the chlorination building secure?

☐ Yes

What condition is the chlorine building in?

☐ Good

☐ Average

☐ Poor

Is a booster pump used for the chlorinator?

☐ Yes

☐ No

Pump Brand \_\_\_\_\_

Model \_\_\_\_\_

Size \_\_\_\_\_

Capacity \_\_\_\_\_

Brand of Injector \_\_\_\_\_

Capacity \_\_\_\_\_

Are there spare parts on hand to repair the chlorinator?

☐ Yes

☐ No

Does the chlorinator feed line have an in line screen or flush valve?

☐ Yes

☐ No

Are there exterior warning signs on the chlorine building?

☐ Yes

☐ No

Are the doors hinged to open outward and equipped with panic bars?

☐ Yes

☐ No

**OTHER OBSERVATIONS OR COMMENTS:**

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Date of Survey: \_\_\_\_\_

## DRINKING WATER FACILITY EVALUATION

### 4. Disinfection Facilities Liquid Hypochlorite

(Field Interview/Inspection)

System Name: \_\_\_\_\_ Number: \_\_\_\_\_

Disinfection Station Number \_\_\_\_\_ Station Name: \_\_\_\_\_

Location: \_\_\_\_\_ Period of Use: \_\_\_\_\_

Source(s) Treated \_\_\_\_\_  
(include source number(s) and name(s))

A. Was Plan Approval received for this Chlorinator? ☐ Yes ☐ No ☐ Unknown

B. Detectable Residual [R309-102-4(1), R309-103-2(7), R309-104-4(7)(4), & R309-205-15(2)]  
10 points will be assessed to a chlorinated water system that does not maintain a chlorine residual at all times.

To be fixed by: \_\_\_\_\_ 0 or 10 Points: \_\_\_\_\_

C. Chlorine Building [R309-205-10(1)(l)]  
2 points will be assessed for each chlorine building that is not properly heated, lighted and vented. Ventilation must include exhausting room air at or near floor level. Heating may be unnecessary in warm climates.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

D. Chlorine Residual Test Kit [R309-205-10(1)(j)]  
2 points will be assessed to a chlorinated water system that does not have a functional chlorine residual test kit.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

E. Spare Parts for Hypochlorinator [R309-205-10-(1)(k)]  
2 points will be assessed to a chlorinated water system that does not have a spare parts kit on hand to repair or replace the Hypochlorinator.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

F. Measurement of Chlorinated Water [R309-205-10(1)(i)]  
2 points will be assessed to a water system that does not have a means of measuring the volume of water treated with chlorine.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

Total Points Assessed: \_\_\_\_\_

Date of Survey: \_\_\_\_\_

#### ADDITIONAL REQUIRED INFORMATION (no points assessed)

What condition is the chlorine building in? ☐ Good ☐ Average ☐ Poor

☐ Good      ☐ Average      ☐ Poor

Is a booster pump used for the chlorinator?

☐ Yes

☐ No

Hypochlorinator Brand \_\_\_\_\_

Model \_\_\_\_\_

Size \_\_\_\_\_

Capacity \_\_\_\_\_

Average Feed Rate \_\_\_\_\_

Solution Concentration \_\_\_\_\_

**OTHER OBSERVATIONS OR COMMENTS:**

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**DRINKING WATER FACILITY EVALUATION****5. Storage Reservoir**

(Field Interview/Inspection)

**System Name:** \_\_\_\_\_ **Number:** \_\_\_\_\_**Reservoir Number:** \_\_\_\_\_ **Reservoir Name:** \_\_\_\_\_**Location:** \_\_\_\_\_**Volume:** \_\_\_\_\_ (gal) **Dimensions:** \_\_\_\_\_**Material of Construction:** \_\_\_\_\_A. Was Plan Approval received for this Storage Unit? ☐ Yes ☐ No ☐ Unknown

B. Uncovered Finished Water Storage [R309-210-9 &amp; R309-210-6]

A water system with an uncovered finished water storage shall immediately be assessed a rating of NOT APPROVED.

**Uncovered Reservoir?** ☐ Yes ☐ No

C. Storage Reservoir Access [R309-210-14]

10 points shall be assessed for a water storage reservoir's access cover that is not an overlapping (shoe box) type lid, that is not locked, gasketed, and does not extend at least 4 inches above the top of the tank or finished grade.

**To be fixed by:** \_\_\_\_\_ **0 or 10 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

D. Storage Reservoir Vents [R309-210-15]

5 points shall be assessed for storage reservoirs that are not properly vented with a turned down vent and screened with at least No. 14 mesh screen or finer in good condition.

**To be fixed by:** \_\_\_\_\_ **0 or 5 Points:** \_\_\_\_\_

E. Storage Reservoir Overflow Piping [R309-210-13]

Up to 15 points shall be assessed to reservoir that has an overflow that is either 1) unscreened with a minimum of no. 4 mesh screen, 2) inadequately sized, 3) improperly sloped, and/or 4) without at least 12 inches of free fall or an adequate air gap if connected to the sewer. Number of points assigned shall be determined by the number and severity of the above mentioned items.

**To be fixed by:** \_\_\_\_\_ **0 to 15 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

Date of Survey: \_\_\_\_\_

F. Storage Reservoir Drainage [R309-210-10(1)]

2 points shall be assessed for a reservoir which does not have an adequate drain line that is properly screened with at least no. 4 mesh and 12 inched free fall.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

G. Integrity of Roof and Sidewalls of Water Storage Reservoirs [R309-210-6(1) & R309-210-9(1)]

Up to 50 points shall be assessed to a reservoir that has cracks and/or other unprotected openings in the roof or sidewalls which are not water tight, or which may affect the structural integrity of the reservoir. Points shall be determined by the severity of problems and by the degree of possible contamination to the drinking water, rodents, birds, and/or any other means permitted by the deficiency in the roof or walls of the reservoir.

To be fixed by: \_\_\_\_\_ 0 to 50 Points: \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

H. Access Ladders and Protective Railings [R309-210-19]

2 points shall be assessed for each storage reservoir that does not have a safe and serviceable access ladder and/or protective railings where required.

To be fixed by: \_\_\_\_\_ 0 or 2 Points: \_\_\_\_\_

I. Internal Coatings of Storage Reservoirs [R309-210-11]

30 points shall be assessed for each storage reservoir that has internal coatings that are not in compliance with ANSI/NSF Standard 61.

To be fixed by: \_\_\_\_\_ 0 or 30 Points: \_\_\_\_\_

Total Points Assessed: \_\_\_\_\_

**ADDITIONAL REQUIRED INFORMATION** (no points assessed)

When was this Storage Reservoir last cleaned? \_\_\_\_\_ years ago.

**OTHER OBSERVATIONS OR COMMENTS:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DRINKING WATER FACILITY EVALUATION****6. Distribution System**

(Field Interview/Inspection)

**System Name:** \_\_\_\_\_**Number:** \_\_\_\_\_A. Was Plan Approval received for this Distribution System? ☐ Yes ☐ No ☐ Unknown

B. System Pressures [R309-102-11 &amp; R309-211-5(1)]

50 points will be assessed to a water system which fails to provide at least 20 psi at all service connections within the water system at all times, including peak instantaneous flow conditions.

**To be fixed by:** \_\_\_\_\_ **0 or 50 Points:** \_\_\_\_\_

C. Adequate System Source Capacity [R309-203-7(1)]

5 to 50 points may be assessed to a system that does not have adequate source capacity to meet peak daily and/ or average yearly flow requirements. The number of points shall be determined by the severity and frequency of shortages, outages or low pressure.

**Existing:** \_\_\_\_\_ **gpm** **To be fixed by:** \_\_\_\_\_**DDW Calculate:** \_\_\_\_\_ **gpm****Difference:** \_\_\_\_\_ **gpm** **0 to 50 Points:** \_\_\_\_\_

D. Adequate System Storage Capacity [R309-203-8]

5 to 50 points may be assessed to a system that does not have adequate storage capacity to meet peak daily flow requirements. The number of points shall be determined by the severity frequency of shortages and/or water outages.

**Existing:** \_\_\_\_\_ **gal** **To be fixed by:** \_\_\_\_\_**DDW Calculate:** \_\_\_\_\_ **gal****Difference:** \_\_\_\_\_ **gal** **0 to 50 Points:** \_\_\_\_\_

E. Piping Materials [R309-211-6]

30 points will be assessed to a water system that uses unapproved pipe, fittings, and material and material for conveyance of drinking water. Piping and fittings must be NFS approved and or meet AWWA Standards or other appropriate approvals. Abestos Cement pipe that has successfully passed a distribution system asbestos monitoring program according to the Drinking Water Rules shall not be assessed any points.

**To be fixed by:** \_\_\_\_\_ **0 or 30 Points:** \_\_\_\_\_

F. Clearance from Sewer Lines [R309-211-7]

30 points will be assessed to a water system that has improperly installed water lines which do not have adequate clearance or separation from sewer lines.

**To be fixed by:** \_\_\_\_\_ **0 or 30 Points:** \_\_\_\_\_

G. Vent Piping on Air and Vacuum Release Valves [R309-211-6(6)]

Up to 2 points shall be assessed each air and/ or vacuum released valve that does not have a properly turned down screen vent, for a maximum total of 20 points possible.

**To be fixed by:** \_\_\_\_\_ **0 to 20 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

Date of Survey: \_\_\_\_\_

**H. Flooded Air and Vacuum Release Valves**

20 points will be assessed to a water system for each air and/or vacuum releases valve chamber that is flooded or subject to flooding, where there is indication that the vent is subject to flooding, where there is indication that the vent is subject to submergence with a total possible of 50 points for the system.

**To be fixed by:** \_\_\_\_\_ **0, 20, 40 or 50 Points:** \_\_\_\_\_

Explanation of assigned points: \_\_\_\_\_

**Total Points Assessed:** \_\_\_\_\_

**ADDITIONAL REQUIRED INFORMATION** (no points assessed)

Does the water system provide fire protection?

☐ Yes

☐ No

If yes, how many hydrants? \_\_\_\_\_

Does the water system have a periodic flushing program?

☐ Yes

☐ No

Does the flushing program include hydrant maintenance?

☐ Yes

☐ No

Does the water system have dead end water lines?

☐ Yes

☐ No

Does the water system have pressure zones?

☐ Yes

☐ No

If yes, how many? \_\_\_\_\_

What are the pressure ranges throughout the system (psi)? (low) \_\_\_\_\_ (high) \_\_\_\_\_

What are the ranges of the different pressure zones?

Pressure Zone Area	psi range	Controls		
		Automatic	Manual	Remote

**OTHER OBSERVATIONS OR COMMENTS:**

\_\_\_\_\_  
\_\_\_\_\_

**DRINKING WATER FACILITY EVALUATION****7. Pump Stations**

(Field Interview/Inspection)

System Name: \_\_\_\_\_ Number: \_\_\_\_\_

Name of Station: \_\_\_\_\_ Location: \_\_\_\_\_

- Pump Stations Is:**
- ☐ Used to boost system pressure (In-line Booster)
- ☐ Used to pressurize water out of a storage reservoir.
- ☐ Used to lift water from a lower tank (zone) to a higher tank (zone)

Name of lower tank (zone): \_\_\_\_\_ &amp; upper tank (zone): \_\_\_\_\_

**NOTE: No points will be issued for any of the following information.**

Are there multiple pumps such that with any one pump out of service the remaining pumps can meet peak instantaneous demand? [R309-209-5(3)] ☐ Yes ☐ No

If yes, how many pumps? \_\_\_\_\_

Pipe Diameter		Motor Horsepower (Hp)	Pumping Capacity	
Suction (inches)	Discharge (inches)		Flow rate (gpm)	* TDH (feet)

Note: \*TDH stands for Total Dynamic Head which includes vertical lift and pipe line friction.

Are the pumps accessible for service and repairs? [R309-209-5(2)(c)] ☐ Yes ☐ No

Are there pressure controls on the suction line of the pump that will automatically shut down the pump when the inlet pressure drops below 10 psi? [R309-209-5(4)(a)] ☐ Yes ☐ No

Is there a serviceable compound pressure gauge on the suction piping? ☐ Yes ☐ No

If yes, pressure gauge reading: \_\_\_\_\_ (psi) ☐ Static ☐ Dynamic

Is there a serviceable pressure gauge on the discharge piping? [R309-209-5(6)(c)] ☐ Yes ☐ No

If yes, pressure gauge reading: \_\_\_\_\_ (psi) ☐ Static ☐ Dynamic

Is there an air & vacuum release valve installed with a No. 14 mesh screened vent? ☐ Yes ☐ No

Is there surge protection or a pressure relief valve installed to prevent water hammer? [R309-209-5(6)(b)(iv)] ☐ Yes ☐ No

Date of Survey: \_\_\_\_\_

Is there a standby power source available in case of power outages or equipment breakdown? [R309-209-5(6)(f)]

☐ Yes

☐ No

Is the pump station properly heated, lighted and ventilated?  
[R309-209-5(2)(e),(f),&(g)]

☐ Yes

☐ No

Is pump station located in a below grade vault? [R309-209-5(1)(a)(i)]  
If yes, are proper safety measures exercised and electrical circuits properly protected?

☐ Yes

☐ No

☐ Yes

☐ No

Is there a current station log book and a preventative maintenance schedule?

☐ Yes

☐ No

**OTHER OBSERVATIONS OR COMMENTS:**

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**DRINKING WATER FACILITY EVALUATION****8. Source Protection**

(Field Interview/Inspection)

**System Name:** \_\_\_\_\_**Number:** \_\_\_\_\_**Source Number:** \_\_\_\_\_**Source Name:** \_\_\_\_\_**Location:** \_\_\_\_\_**System Population:** \_\_\_\_\_

NOTE: *Non-community sources constructed prior to 7/26/93 are not required to have a source protection plan. However, the system will be eligible for incentive points if a source protection plan is implemented.*

A. Is there a current source protection plan in place that covers this source? [R309-113-3(2)] ☐ Yes ☐ No

B. 5 points will be assessed to a water system that has not delineated a protection area of its groundwater sources in accordance with the required time frame. Points shall remain until the source is properly delineated and the plan has been concurred with the Division personnel.

[R309-113-9]

**To be fixed by:** \_\_\_\_\_**0 or 5 Points:** \_\_\_\_\_

C. 5 points will be assessed to a water system that has not inventoried potential sources of contamination for its ground water sources. [R309-113-10]

**To be fixed by:** \_\_\_\_\_**0 or 5 Points:** \_\_\_\_\_

D. 5 points will be assessed to a water system that has not developed a management program for pre-existing potential contamination sources. [R309-113-11]

**To be fixed by:** \_\_\_\_\_**0 or 5 Points:** \_\_\_\_\_

E. 5 points will be assessed to a water system that has not developed a management program for future potential contamination sources.

**To be fixed by:** \_\_\_\_\_**0 or 5 Points:** \_\_\_\_\_**Total Points Assessed:** \_\_\_\_\_

20 CREDIT points will be awarded to a water system that has completed all of its source protection plans before the required due date.

**Credit**  
**0 or 20 Points:** \_\_\_\_\_

**OTHER OBSERVATIONS OR COMMENTS:**


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# DRINKING WATER FACILITY EVALUATION

## 9. Waiver Verification

(Field Interview/Inspection)

System Name: \_\_\_\_\_

Number: \_\_\_\_\_

Source Number: \_\_\_\_\_

Source Name: \_\_\_\_\_

Period of Use: \_\_\_\_\_

NOTE: *No points issued for any of the following information.*

Are there any potential sources of contamination within 5,000 feet up gradient of the water levels in the source or 5,000 foot radius of a well?

☐ Yes

☐ No

NOTE: *If a source protection plan has been established for this source, then the 5,000 feet distance shall be replaced by the delineated 3 year time of travel distance.*

Describe any potential sources such as fuel storage, septic tanks, pesticide or chemical storage tanks, industry, mining or feedlots?

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Has the area within 5,000 feet up gradient of the water level in a spring or within 5,000 feet radius of a well been sprayed for insects or weed control in the last 10 years?

☐ Yes

☐ No

If yes, describe type and method of application of chemicals.

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Is the source subject to any surface water intrusion or flooding at any time during the year?

☐ Yes

☐ No

Is there an adequate management plan in place to effectively eliminate the risk of contaminant sites polluting the source?

☐ Yes

☐ No

Does any of the source transmission lines or distribution system contain asbestos/cement pipe?

☐ Yes

☐ No

### OTHER OBSERVATIONS OR COMMENTS:

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Date of Survey: \_\_\_\_\_

## DDW CALCULATIONS

System Name: \_\_\_\_\_

Number: \_\_\_\_\_

### Indoor Water Use

Population served ----- > > > \_\_\_\_\_  
 No. of residential connections ----- > > > \_\_\_\_\_  
 No. of other connections - - - > > > \_\_\_\_\_ ERCs of other connection \_\_\_\_\_  
*ERC = peak day demand of other connections / 800 gal/day*  
*(See next sheet for examples)* Total ERCs \_\_\_\_\_

MINIMUM REQUIREMENTS					
Source		Storage		Water Rights	
Per Unit (gpd/ERC)	Total (gpm)	Per Unit (gallons/ERC)	Total (gallons)	Per Unit (ac-ft/yr)	Total (ac-ft/yr)
800	0.0	400	0	0.45	0.00

### Outdoor Water Use

Is the drinking water used for outdoor irrigation? ☒ Yes ☐ No  
 Avg irrigated lot size per residential connection (acres). ----- > > > \_\_\_\_\_  
 Total irrigated acreage of other connections. ----- > > > \_\_\_\_\_  
 Irrigation zone \_\_\_\_\_

MINIMUM REQUIREMENTS					
Source		Storage		Water Rights	
Per Unit (gpd/ERC)	Total (gpm)	Per Unit (gallons/ERC)	Total (gallons)	Per Unit (ac-ft/yr)	Total (ac-ft/yr)
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

### Fire Flow Requirement

Does the water system provide fire protection? ☐ Yes ☐ No  
 Maximum fire suppression **demand** for *water system* or *pressure zone* (gpm) \_\_\_\_\_  
 Maximum fire suppression **duration** for *water system* or *pressure zone* (hours) \_\_\_\_\_  
 Required Fire Suppression Storage (gallons) ----- > > > \_\_\_\_\_

### Total Water System Requirements

MINIMUM REQUIREMENTS					
Source		Storage		Water Rights	
Per Unit (gpd/ERC)	Total (gpm)	Per Unit (gallons/ERC)	Total (gallons)	Per Unit (ac-ft/yr)	Total (ac-ft/yr)
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

Zone	Peak Day Demand	Avg Year Demand	Storage Reqmt
0	NO ZONE	NO ZONE	NO ZONE

IRRIGATION DEMANDS				
(to be added to indoor and fire flow demands)				
zone	Peak Day (gpm/irr. ac)	Avg. Yr. (ac-ft/yr per irr. ac.)	Storage Requirement (gal/irr. ac)	Peak Instantaneous (gpm/irr. ac)
1	2.26	1.17	1,782	4.52
2	2.80	1.23	1,873	5.60
3	3.39	1.66	2,528	6.78
4	3.96	1.87	2,848	7.92
5	4.52	2.68	4,081	9.04
6	4.90	3.26	4,964	9.80

Date of Survey:

## CONCLUSIONS

These items MUST BE COMPLETED as noted in accordance with the Utah Public Drinking Water Rules.

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Date of Survey: \_\_\_\_\_

## RECOMMENDATIONS

These items should be completed as noted to protect the integrity and/or reliability of the drinking water system and in accordance with anticipated E.P.A. requirements.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.